REMARKS

This paper is filed in response to the Office Action mailed April 10, 2009.

Claims 1-25 are pending in this application. Applicant has amended claims 1, 16, and 23. Applicant has also revised paragraph 43 of the specification. No new matter is added by these amendments, and support may be found in the specification and claims as originally filed.

Claims 23-25 were rejected under 35 U.S.C. § 101 as allegedly being directed to unpatentable subject matter. Claims 12-22 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,563,487 to Martin et al ("Martin"). Claims 1-11 and 23-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,819,312 to Fish ("Fish") in view of U.S. Patent No. 6,084,587 to Tarr et al ("Tarr").

Applicant has amended claims 1 and 23. No new matter is added by these amendments, and support may be found in the specification and claims as originally filed.

Applicant traverses each of the rejections in the Office Action, and respectfully requests reconsideration and allowance of all claims in light of the amendments above and the remarks below.

I. § 101 – Claims 23-25

Applicant respectfully traverses the rejection of claims 23-25 under 35 U.S.C. § 101 as allegedly being directed to non-patentable subject matter.

In the Office Action, claims 23-25 were rejected as being drawn to unpatentable subject matter because the term "computer-readable medium" includes "broad, non-clear terms such as 'all optical media' and 'other magnetic media'" that can include a light wave or other electromagnetic wave. However, one of ordinary skill in the art would have understood the term "media" to refer to physical media, such as hard drives, CD-ROM disks, or other physical storage media. For example, the 2002 Microsoft Computer Dictionary defines "media" as "[t]he physical material, such as paper, disk, and tape,

used for storing computer-based information."[1] As such, claims 23-25 are drawn to a physical apparatus and not a pure signal or wave, and are therefore directed to patentable subject matter.

Applicant respectfully requests the Examiner withdraw the rejection of claims 23-25 under 35 U.S.C. § 101.

II. § 102(e) – Martin – Claims 12-22

Applicant respectfully traverses the rejection of claims 12-22 under 35 U.S.C. § 102(e) as allegedly being anticipated by Martin.

To anticipate a claim under 35 U.S.C. § 102(e), a reference must disclose each and every element of the claimed invention. See M.P.E.P. § 2131.

Because Martin does not disclose "the haptic effect comprises a plurality of detents defining: a first primary channel defined along a first axis, a second primary channel defined along a second axis, a first secondary channel proximate to the first primary channel, and a second secondary channel proximate to the second primary channel, the detents configured to substantially constrain movement to one of the first primary channel, the second primary channel, the first secondary channel, or the second secondary channel" as recited in claim 16, Martin does not anticipate claim 16. Martin discloses a gamepad that includes a haptically-enabled directional pad. However, Martin does not disclosed the haptic effects recited in claim 16.

To support the rejection, the Examiner argues that "the detents are the edges of the pad 18 interacting with the plurality of voice coil 176 which has the effect of containing motion and thereby modifying the feedback." But contrary to this assertion, the haptic effects recited in claim 16 are created by the actuation of an actuator to output one of the recited detent effects. The fact that the directional pad of Martin may be physically constrained by incidental physical contact with other components of the game pad is not relevant to the creation of actuator-output effects, particularly detent effects that are output to "substantially constrain movement to one of the first primary channel, the second primary channel, the first secondary channel, or the second secondary channel."

[1] Microsoft Computer Dictionary, Fifth Ed., Microsoft Corp. 332 (2002).

The Examiner responds that secondary elements 144 and 176 introduce haptic effects. However, elements 144 are merely springs. They do not produce detent forces to define the channels recited in claim 16. Further, while elements 176 are part of an actuator for outputting effects on the directional pad, the effects generated by the magnets 176 in conjunction with electrical coils 174 cause the entire directional pad to change orientation or to move along the disclosed Z-axis. However, these effects are not disclosed to provide detent forces to define the channels recited in claim 16. As such, Martin does not anticipate claim 16. Applicant respectfully requests the Examiner withdraw the rejection of claim 16.

Because claims 12-15 and 17-22 depend from and further limit claim 16, claims 12-15 and 17-22 are each patentable over Martin for at least the same reasons. Applicant respectfully requests the Examiner withdraw the rejections of claims 12-15 and 17-22.

III. § 103(a) – Fish in view of Tarr – 1-11 and 23-25

Applicant respectfully traverses the rejection of claims 1-11 and 23-25 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fish in view of Tarr.

To sustain a rejection of a claim under 35 U.S.C. § 103(a), the scope and content of the prior art must disclose or suggest the claimed invention. *See* M.P.E.P. § 2141, 2143.

Because Fish in view of Tarr does not disclose or suggest "a first haptic effect configured to guide a movement of a user manipulatable object of an interface device" as recited in claim 1, claim 1 is patentable over the combined references. Fish discloses haptic elements (referred to as haptels), each of which is configured to output a haptic effect. However, the haptels are not disclosed to be capable of outputting a force to guide a movement of a user manipulatable object of an interface device. The Examiner suggested that a cursor displayed on a screen could be a user manipulatable object. However, the pending claims, as amended, are directed to a user manipulatable object of an interface device, which does not include a cursor or other displayed virtual object. Tarr does not cure this deficiency. Tarr generally discloses a virtual entity within a virtual world having physical characteristics, but Tarr does not teach or disclose "a first haptic effect configured to guide a movement of a user manipulatable object." Therefore,

because the combined references do not teach or disclose "a first haptic effect configured to guide a movement of a user manipulatable object" as recited in claim 1, claim 1 is patentable over Fish in view of Tarr. Applicant respectfully requests the Examiner withdraw the rejection of claim 1.

Like claim 1, claim 23 recites "a first haptic effect configured to guide a movement of a user manipulatable object of an interface device." Claim 23 is patentable over Fish in view of Tarr for at least the same reasons as claim 1. Applicant respectfully requests the Examiner withdraw the rejection of claim 23.

Because claims 2-11, 24 and 25 each depend from and further limit one of claim 1 or 23, claims 2-11, 24, and 25 are each patentable over Fish in view of Tarr for at least the same reasons. Applicant respectfully requests the Examiner withdraw the rejection of claims 2-11, 24, and 25.

CONCLUSION

Applicant respectfully asserts that in view of the amendments and remarks above, all pending claims are allowable and Applicant respectfully requests the allowance of all claims.

Should the Examiner have any comments, questions, or suggestions of a nature necessary to expedite the prosecution of the application, or to place the case in condition for allowance, the Examiner is courteously requested to telephone the undersigned at the number listed below.

Respectfully submitted,

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